

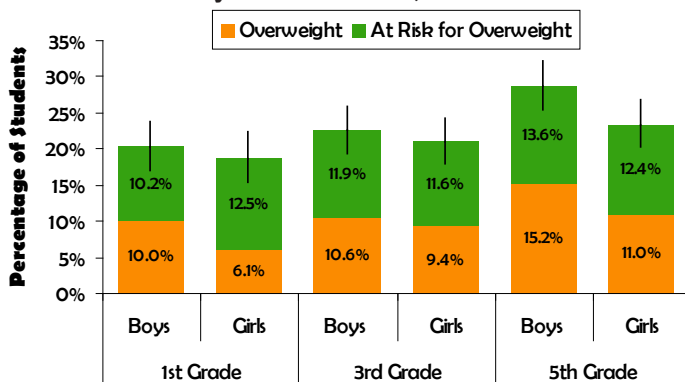
Appendix E:
2006 Elementary
School Height and Weight
Survey Report

Childhood Overweight in Utah, 2006

From January to April 2006, 4,310 students (1st, 3rd, and 5th grades) from 69 randomly selected public elementary schools throughout the state were weighed and measured in order to determine the extent of childhood overweight in Utah. The collected data represent all elementary school students in Utah. This study was conducted by the Utah Department of Health, local school districts, and school nurses. Findings from the study are as follows:

Figure 1.

Percentage of Students Overweight or at Risk of Overweight by Grade and Sex, Utah 2006



Source: 2006 Utah Height/Weight Study, Utah Department of Health.

Body Weight Terminology:

Body Mass Index (BMI) is a standardized measurement based on height and weight that is used to estimate the amount of body fat for an individual.

BMI between 85th and 95th percentiles

Adults are called overweight.

Children are called at risk for overweight.

BMI over 95th percentile

Adults are called obese.

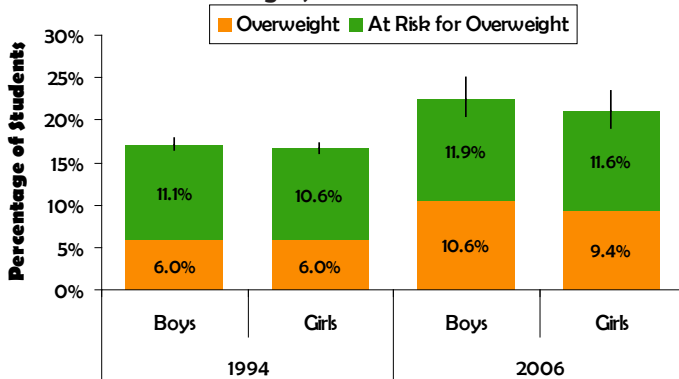
Children are called overweight.

In 2006, more than one in five Utah elementary school students were at an unhealthy weight, or about 58,745 students.

In Utah, we have seen an increase over time in the percentage of 3rd grade students who are overweight.

Figure 2.

Percentage of 3rd Grade Students Overweight or at Risk of Overweight, Utah 1994 and 2006



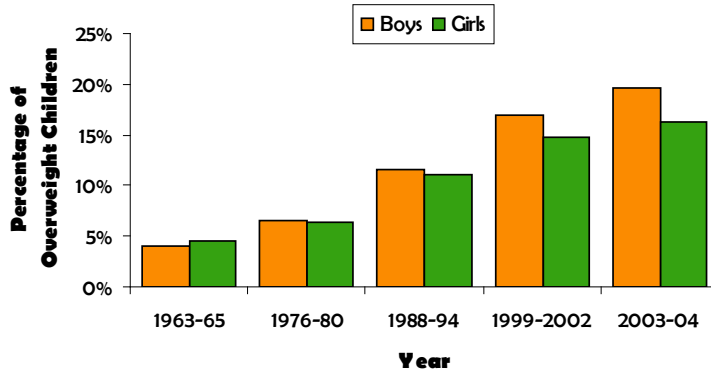
Source: 1994 Bureau of Health Promotion, Heart Disease and Stroke Prevention and 2006 Utah Height/Weight Study, Utah Department of Health.

- More boys were overweight at every grade.
- The percentage of overweight students increased with grade.
- In 2006, 22.5% of all elementary students were at an unhealthy weight.
- In 1994, 16.9% of 3rd graders were at an unhealthy weight and, in 2006, it increased to 21.8%. This represents a 29% increase in 12 years.
- Third grade rates of unhealthy weight are similar to the rate for all elementary grades (grades 1-6).
- If the number of elementary school students at an unhealthy weight continues to increase at the current rate, in ten years a total of 30.3% of elementary school students will be at an unhealthy weight.

National Data for Children:

Figure 3.

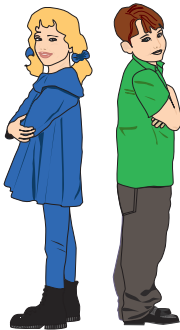
**Overweight Among Children 6 to 19 Years of Age,
National Data from NHANES Survey**



Source: National Health and Nutrition Examination Survey (1963-65, 1976-80, 1988-94, 1999-2002, and 2003-04).

National data for children show an increase in body weight over time.

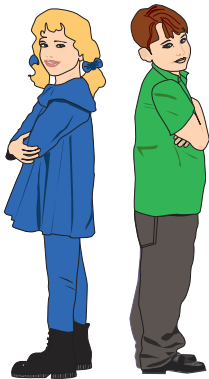
- A continued increase in percentage of overweight children was observed.
- More boys are overweight compared to girls.
- Percentage of overweight has more than doubled since the 1960s.
- The proportional increase is greater for older children.



First Graders' (6-Year Old Children) Weight Has Increased 4.9% in 30 Years.

(Ogden et. al., 2004)

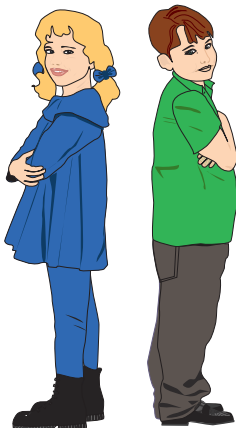
- In 1963-65 the average boy was 46.7 inches tall and weighed 48.4 lbs
- In 1999-2002 the average boy was 46.9 inches tall and weighed 51.7 lbs
- In 1963-65 the average girl was 46.4 inches tall and weighed 47.4 lbs
- In 1999-2002 the average girl was 46.1 inches tall and weighed 49.2 lbs
- A 6.0% increase in body weight over 30 years for boys
- A 3.8% increase in body weight over 30 years for girls



Third Graders' (8-Year Old Children) Weight Has Increased 16.8% in 30 Years.

(Ogden et. al., 2004)

- In 1963-65 the average boy was 51.2 inches tall and weighed 61.1 lbs
- In 1999-2002 the average boy was 52.2 inches tall and weighed 72.0 lbs
- In 1963-65 the average girl was 50.9 inches tall and weighed 60.6 lbs
- In 1999-2002 the average girl was 51.5 inches tall and weighed 70.1 lbs
- A 17.8% increase in body weight over 30 years for boys
- A 15.7% increase in body weight over 30 years for girls



Fifth Graders' (10-Year Old Children) Weight Has Increased 14.0% in 30 Years.

(Ogden et. al., 2004)

- In 1963-65 the average boy was 55.2 inches tall and weighed 74.2 lbs
- In 1999-2002 the average boy was 55.7 inches tall and weighed 84.9 lbs
- In 1963-65 the average girl was 55.5 inches tall and weighed 77.4 lbs
- In 1999-2002 the average girl was 56.4 inches tall and weighed 87.9 lbs
- A 14.4% increase in body weight over 30 years for boys
- A 13.6% increase in body weight over 30 years for girls

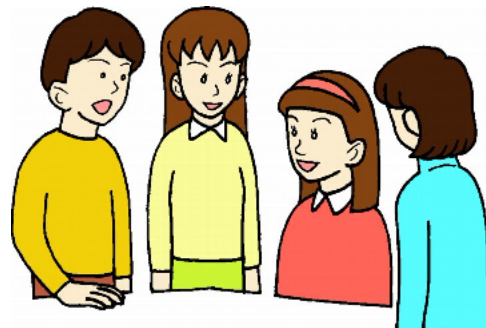
The Effects of Childhood Overweight:

Childhood overweight predicts obesity later in life

- 80% of children who were overweight at any time during the elementary period were overweight at 12 years of age (Nader, 2006)

Adult diseases now observed in overweight children

- Hardening of arteries, hypertension, and hyperlipidemia which can lead to heart disease (Freedman, 1999; Gidding, 1995, Cabrinety, 2002, Berenson, 1998, Ernst, 1994)
- Diabetes (Pinhas-Hamiel, 1996)
- Glucose intolerance (Shinha, 2002)
- Sleep-associated breathing disorders (Mallory, 1989)
- Iron deficiency (anemia) (Nead, 2004)



Social and psychological impact of childhood overweight

- Social isolation (Strauss, 2003)
- Increased rate of suicidal thoughts and attempts associated with weight-based teasing (Eisenberg, 2003)
- Low self-esteem due to low body image (Strauss, 2000)
- Increased rate of anxiety disorders and depression in overweight girls (Anderson, 2006)
- Increased likelihood to report difficulties in school (Schwimmer, 2003)
- Reduced self-assessed quality of life (Williams, 2005)

“Because of the increasing rates of obesity, unhealthy eating habits, and physical inactivity, we may see the first generation that will be less healthy and have a shorter life expectancy than their parents.”

US Surgeon General Richard Carmona, March 2004

How can we impact children's lives to change this trend?

We can change this trend by working with:



Families



Health Care



Schools



Media



Communities



Government



Worksites

In 2006, Governor Jon M. Huntsman, Jr. released the *Utah Blueprint to Promote Healthy Weight in Children, Youth, and Adults*. Objectives and strategies for each of the above groups are included. This document is found on the Internet at www.health.utah.gov/obesity/docs/obesityblueprint.pdf.

References:

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Resources:

- Bureau of Health Promotion. Tipping the Scales Toward a Healthier Population: A Report of Overweight and Obesity in Utah. Salt Lake City, Utah: Utah Department of Health, 2005. Located on the Internet at <http://health.utah.gov/obesity/>
- Obesity in Utah Web site. Utah Department of Health, Bureau of Health Promotion. Located on the Internet at <http://health.utah.gov/obesity/>
- Check Your Health. Utah Department of Health, Intermountain Healthcare, and KUTV Channel 2 News. Located on the Internet at <http://www.checkyourhealth.org/>

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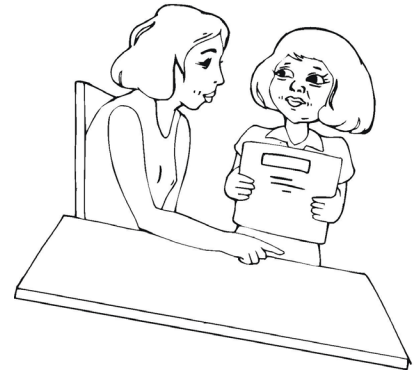


Schools

How Can We Decrease Childhood Overweight in Utah?

In 2006, Governor Jon M. Huntsman, Jr. released the *Utah Blueprint to Promote Healthy Weight in Children, Youth, and Adults*. The goal and objectives below are taken from that document. The document is available at <http://www.health.utah.gov/obesity/docs/obesityblueprint.pdf>.

GOAL: Utah's schools will assume an active role in addressing childhood overweight.



Objective 1: Increase the number of schools that have policies and an environment that encourage regular physical activity.

- Participate in the Gold Medal Schools Program.
- Promote walking and/or biking to and from school for children and adolescents.
- Provide access to intramural sports programs and other physical activity clubs and programs.
- Employ certified physical education (PE) specialists.
- Adopt physical education requirements for all grades.

Objective 2: Increase access to and selection of healthy foods in schools.

- Monitor school menus and food preparation techniques to assure that foods offered in addition to the standard lunch meal, such as a la carte items, meet healthful requirements.
- Create a positive and appealing environment for meals.
- Link classroom and nutrition education lessons to food service activities.
- Increase participation in school breakfast and lunch programs.
- Educate school administrators and PTAs about nutritional standards for competitive foods in schools.
- Encourage adoption of nutritional standards for competitive foods and beverages established by Action for Healthy Kids.
- Encourage the PTAs and parents to provide nutritious foods for all extracurricular activities, such as athletics.

Objective 3: Increase the number of elementary school teachers who teach the Utah nutrition core curriculum.

- Identify barriers to teaching the core curriculum.

Objective 4: Increase the number of secondary health teachers who teach nutrition application and behavioral skills as opposed to didactic information.

- Adopt and use the State Office of Education's lifetime physical activity curriculum.
- Add specific life skill lessons to the health curriculum.

Objective 5: Decrease the number of activities and fundraisers focusing on food at events.

- Encourage PTAs, student groups, and clubs to choose activities and fundraisers that do not focus on food.
- Encourage parents and teachers to limit foods used in the classroom for rewards and parties.

Examples of Success:

Gold Medal Schools Program: This program encourages Utah elementary schools to create opportunities for students to eat healthy, be active, and to stay tobacco-free. In 2001 when the program started, 34 elementary schools participated; in 2006 a total of 284 elementary schools have participated. Currently just more than half of all Utah elementary schools participate in the Gold Medal Schools Program.

Bountiful High School Received \$1000 to Fight Teen Obesity: Bountiful High School was one of 50 schools nationwide to receive a first prize award of \$1000 from the “2005: got milk? Healthy Schools Challenge Contest” which was jointly cosponsored by the “got milk?” campaign and the National Basketball Association.

Wasatch School District Established a Nutrition Policy: In July 2004, the Wasatch School District became the first Utah district to establish a nutrition policy limiting sweets and junk food. There is a ban on vending machines in elementary and middle schools and a plan to offer fewer processed foods and more fruits, vegetables, and low-fat and low-sugar items.

Nebo School District “De-Junked” Its School Vending Machines: In December 2004, the Nebo School District unanimously passed a policy requiring all middle and high school vending machines to offer at least 50 percent healthy snacks or drinks.

In 2006, the Cache County and Alpine School Districts were awarded Carol M. White Physical Education Program (PEP) Grants, which are intended to provide funds to local educational agencies and community-based organizations to initiate, expand, and improve physical education programs (including after-school programs) for students in one or more grades from kindergarten through 12 in order to make progress toward meeting State standards for physical education by providing funding for equipment, support, and the training and education of teachers and staff. The Cache County School District was awarded \$389,658 and the Alpine School District was awarded \$452,061.

Resources:

Gold Medal Schools. <http://www.hearhighway.org/gms/index.html>. Contact Sarah Rigby at 801-538-9454 or srigby@utah.gov.

Action for Healthy Kids. Located at <http://www.actionforhealthykids.org>. Contact Julie Metos at 801-587-3024 or julie.metos@hsc.utah.edu.

Utah State Office of Education. Contact Frank Wojtech at 801-538-7732 or frank.wojtech@schools.utah.gov.

American Beverage Association & American Heart Association/Clinton Alliance. Located at <http://americanheart.org/presenter.jhtml?identifier=3030527>.

National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health. Located at <http://www.cdc.gov/healthyyouth/>.

National Association of State Boards of Education. Located at http://nasbe.org/healthy_schools/.

School Nutrition Association Local Wellness Policy Recommendations. Located at <http://www.schoolnutrition.org/index.aspx?id=1075>.
